

TABLE 1. QUALITY CRITERIA

Resource Concern	Definition	Quality Criteria	Assessment Tool
A. SOIL			
1. Erosion			
a. Wind	Erosion caused by wind	Soil erosion shall not exceed the soil loss tolerance "T"	Current approved erosion prediction tool - Wind Erosion Equation (Excel WEQ), Management Period Method
b. Water, Sheet and Rill	Erosion caused by rainfall, snowmelt and surface water runoff where flow channels are normally obscured by mechanical means	Soil erosion shall not exceed the soil loss tolerance "T"	Current approved erosion prediction tool - Revised Universal Soil Loss Equation
c. Water, Concentrated Flow, Ephemeral Gully	Flow channels that are normally obscured by tillage	Flow area is stabilized and does not increase in aerial extent	Aerial extent calculation
d. Water, Concentrated Flow, Classic Gully	Flow channels that are not normally obscured by mechanical means	Flow area is stabilized and does not increase in aerial extent	Aerial extent calculation
e. Water, Irrigation Induced	Erosion caused by excessive amounts of water in row, furrow and sprinkler irrigation activities or by water conveyances and tracks from center pivots and traveling guns and runoff channels	Sprinkler application rates and furrow irrigation flow rates are within allowable values as defined in the National Irrigation Guide.	National Irrigation Guide
f. Water, Stream Bank	Accelerated sloughing of banks caused by streamflows, overbank flows, unstable soils, previous channelization, obstructions and trampling (including human activity, or heavy equipment use), or all or any combination of these conditions.	Stream is in proper functioning condition, or if off-site conditions cause the stream to not be in proper functioning condition, the landuser is not contributing to the problem	Stream Visual Assessment Protocol
2. Condition			
a. Tilt	Physical condition of the soil relating to its ease of tillage and fitness as a seedbed which provides a low level of impedance to seedling emergence and root penetration	Soil Conditioning Index rating will reflect a positive soil condition for cropland	Current approved Soil Conditioning Index

TABLE 1. QUALITY CRITERIA (continued)

Resource Concern	Definition	Quality Criteria	Assessment Tool
B. WATER			
1. Quantity			
a. Water management, irrigated	Existing water supply is not used in a timely and efficient manner, which includes managing water yield, surface flows and/or groundwater recharge	Irrigation water is applied according to an irrigation water management plan that meets the 449 Standard, minimizing losses to surface and groundwater to the extent feasible	Farm Irrigation Rating Index (FIRI)
2. Quality			
a. Groundwater contaminants	Beneficial uses of groundwater are impaired by contaminants	Nitrogen – medium risk rating Pesticides – low risk rating, or medium risk rating when additional mitigation techniques are applied	Nitrogen – Colorado Nitrogen Leaching Index Pesticides – Windows Pesticide Screening Tool
b. Surface water contaminants	Beneficial uses of surface water are impaired by contaminants	Phosphorus – medium risk rating Pesticides – low risk rating, or medium risk rating when additional mitigation techniques are applied	Phosphorus – Colorado Phosphorus Index (version 2.0) Pesticides – Windows Pesticide Screening Tool
C. AIR			
Federal and State agencies set quality criteria and monitor this resource			
D. PLANTS			
1. Condition			
a. Cropland Productivity	Crops are of a kind and/or quality that do not meet the landowner's objectives and may not sustain the resource	A healthy, vigorous stand yielding 75% or more of the high management yield potential for the soil map unit.	Comparison to similar crops in the area with different management. Crop consultant information, producer yields, soils data
b. Pasture and Hayland Health and Productivity	Plant communities do not produce forage and/or cover in the quantity, quality and timeliness needed to meet decision-maker objectives and sustain the resource	A healthy, vigorous stand of desired species yielding 65% or more of the high management yield potential for the species for the given forage suitability group	National Range & Pasture Handbook – Pasture Inventory Worksheet and Pasture Condition Score Sheet

TABLE 1. QUALITY CRITERIA (continued)

Resource Concern	Definition	Quality Criteria	Assessment Tool
D. PLANTS			
1. Condition			
c. Grazingland Health and Productivity (Grazed Forest and Range)	Plant communities do not produce forage and/or cover in the quantity, quality and timeliness needed to meet conservation, environmental, decision-maker and public objectives	Maintaining a plant community with a similarity index of 60 percent or more or having an upward trend for plant communities with a similarity index less than 60 percent	National Range & Pasture Handbook (Similarity Index Worksheet, Forage Balance Worksheet, and Rangeland Health Worksheet)
d. Forest Health and Productivity	Plant communities do not produce wood fiber in the quantity, quality and timeliness needed to meet decision-maker objectives and sustain the resource	Forest overstory stocking levels are within 25 percent of the "D+X" spacing guide or equivalent for the particular site and stand composition; trees within the stand are uniformly distributed. Under story plant community is comprised of 50 percent or more, by weight, of expected species for the site and is proportionate with over story canopy. Bare mineral soil comprises 50 percent or less of ground surface area	Stocking rate of preferred species, basal area measurement of trees, timber production,
E. ANIMALS			
1. Habitat			
a. Domestic	The food, water, shelter, space and sanitation provided to animals is inadequate for optimum health and production.	Domestic animals are provided adequate food, water, shelter, space and sanitation to meet daily requirements	National Range and Pasture Handbook, NUTBAL, Forage Inventory (ECS-20, ECS-19), Forage Balance Worksheet (ECS-1)
b. Wildlife	Wildlife habitat does not consist of suitable food, cover/shelter, water and space	Wildlife habitat evaluation guide index is 0.5 or greater for the land use	Wildlife habitat evaluation guide index